1 Introduction

1.1 Introduction

This is a multi-mode 3G LGA module. It works in HSDPA/UMTS/EDGE/GPRS/GSM networks. It integrates the functionality of a modem and a mobile phone (SMS), and combines mobile communication with Internet perfectly. It supports data, and SMS services through the mobile phone network, enabling you to communicate anytime and anywhere.

1.2 Functions

Functions	SMS, Data service, Applications management, etc.
Network Standards.	HSDPA/UMTS/EDGE/GPRS/GSM
Transmission (Max. data rate)	HSDPA: 3.6 Mb/s DL

1.3 FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If

this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/ TV technician for help.

1.4 RF Exposure

Your device contains a transmitter and a receiver. When it is ON, it receives and transmits RF energy. When you communicate with your device, the system handling your connection controls the power level at which your device transmits.

Important safety information regarding radiofrequency radiation (RF) exposure. To ensure compliance with RF exposure guidelines the device must be used with a separation from the body. Failure to observe these instructions could result in your RF exposure exceeding the relevant guideline limits.

The maxim permissible exposure is defined in 47 CFR 1.1310 with 1mW/cm*cm. The transmitter is using external antenna that operate at 20cm or more from nearby persons. The maxim power density is 0.157mW/cm*cm.

The FCC grant can be found under the Display Grant section of http://www.fcc.gov/oet/fccid
after searching on **FCC ID: Q78-ZTEMF206A**.

1.5 IC

This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required

antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type，are strictly prohibited for use with this device.
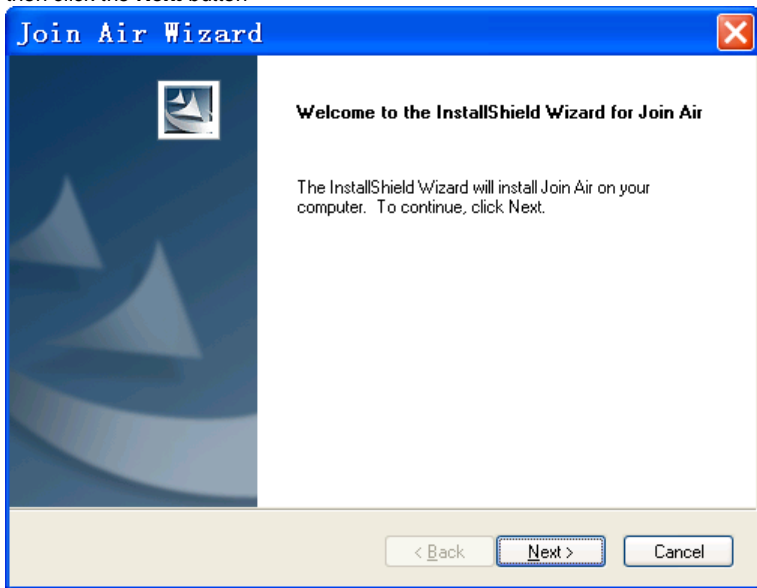
Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permission antenna gain（in dBi）and required impedance for each.

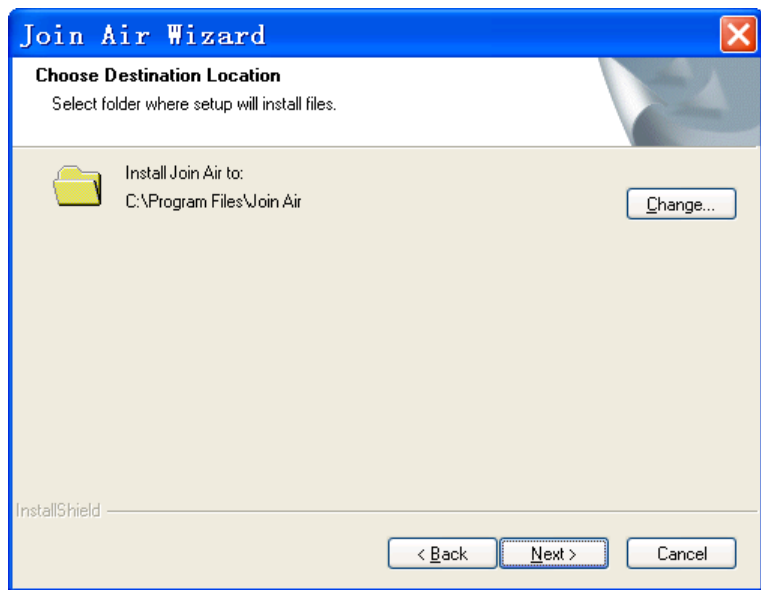**IC ID: 5200A-ZTEMF206A**

.

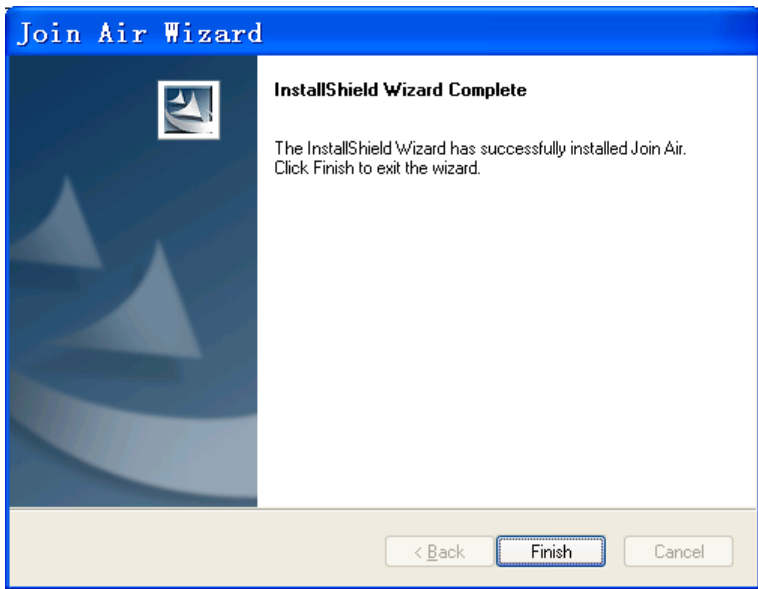# 2 Installation

2.1 Install Software

1. It is strongly recommended that you exit all other Windows programs, and then click the **Next** button

2. Select the folder that you want to install the software by pressing the **Change** button, and then click the **Next** button.

Join Air Wizard

Choose Destination Location
Select folder where setup will install files.

Install Join Air to:
C:\Program Files\Join Air

[Change...]

InstallShield

[< Back] [Next >] [Cancel]

3. The system shows the installation progress, wait a minute and click the **Finish** button to complete the installation.

Note: After the software is installed, pull out the modem before restarting the computer to avoid damages to your modem. If you have problems with the installation steps above, please contact your service provider or ZTE.

After the installation, select **Start > Programs > Join Air**. You can find **Join Air** and **Uninstall**. There will be a shortcut icon on the desktop just as follows.

2.2 Run the Application Software

After the modem is correctly connected to the computer, click **Start > Programs > Join Air > Join Air** on the computer to run the application software. You can also launch the application software by double-clicking the shortcut icon

shown above.

After the modem is initialized, the main interface of the connection manager appears. The standby icon appearing in the taskbar indicates the modem working normally.

3 Functions & Operation

3.1 Interface introduction

3.1.1 Main Interface

The following picture is the starting screen of the software. The whole interface is divided into four parts. Related functions can be executed by operation in the related areas.

System information area →

Main menu button area ←

Internet information area →

Function button area →

System information area

Icons in this area show the system status and different kinds of tips.

Icon	Explanation
![signal]	Indication of signal strength, which is divided into 6 stages from none to the strongest.
EDGE	Indication of current network type.
R	Roaming.
P	Packet switched
C	Circuit switched

Internet information area

This area shows the name of the current service provider, device condition and connection information.

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Function button area

There are five function button icons.

SMS: Send, read and manage SMS.

Phonebook: Manage contact information.

Settings: Setting options for the device.

Data records: Show connection information.

Connect: Connect to the Internet.

Main menu button area

Click the icon to popup the following menu:

Log: The record of software operation.

Diagnostics: View Hardware information, Operational information and Network Settings.

Help: Show the help document.

Exit: Close the software.

3.2 Description of Mini Icons

Click the minimize button and the software will minimize as an icon on the taskbar. This will not influence data transfer or sending and receiving of SMS. Double click the icon on the taskbar to restore the window.
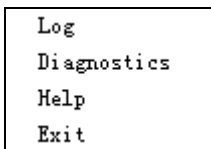
Taskbar icons description

The device is ready to connect to the Internet.

The device is connected to the Internet.

The uses of taskbar icons

Click the taskbar icon , the following menu will appear. Please refer to **Main menu button area** in Section 3.1.

```
Log
Diagnostics
Help
Exit
```

Log: The record of software operation.
Diagnostics: View Hardware information, Operational information and Network Settings.
Help: Show the help document.
Exit: Close the software.

3.3 Connecting to the Internet

With the help of your device, you can access the Internet and browse web pages while still be able to send and receive SMS.

Click the **Connect** button . The system will search for available networks automatically. You can click **Cancel** button to cancel connection.

When connected, connection duration and data record will be shown in the Internet information area. Then you can access the Internet and receive email etc, through the network.
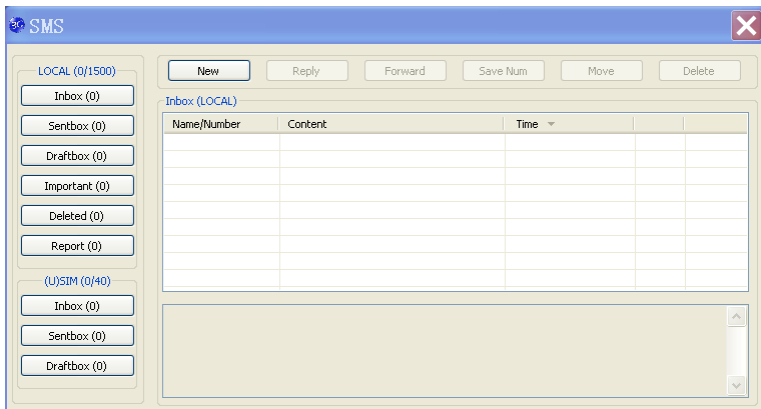
When the connection is established, the "**Connect**" button changes into the **Disconnect** button 🔵. Click it to disconnect from the Internet.

3.4 SMS

Note: To make sure that the SMS can be used properly, please setup the correct SMS center number. Refer to section *3.6.4 SMS Settings*.

Click the **SMS** icon ✉ to switch to the SMS interface, which shows the number of SMS in your PC (LOCAL) and (U)SIM card. Click **Inbox**, **Sentbox**, **Draftbox**, **Important**, **Deleted**, **Report** to enter relative interface.

Inbox: Save the received messages.
Sentbox: Save the sent messages.
Draftbox: Save the draft messages.
Important: Save the important messages that you have moved from other folders.
Deleted: Save the deleted messages.
Report: Save the message reports.
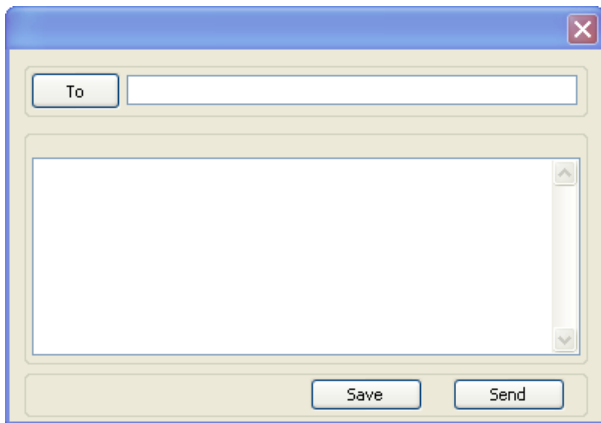
3.4.1 Check SMS

When an incoming message is received, a pop-up dialog box will appear above the taskbar. Click the **Inbox** button to check the new message.
Click other buttons in the SMS window to view the messages in each folder. Select a message to read its full content below the message list.

3.4.2 Create a new message

Click the **New** button to open a new dialog box and input the recipient's number and message content.

The recipient's number can be input directly or by clicking the **To** button and selecting contacts from the **Phonebook**.

To send a message to multiple recipients, please separate each recipient with ";".

The SMS content can include 160 individual English characters (including English symbols). The total characters and the number of messages need to be sent are shown in the dialog box.

Click **Send** and then click **OK** to send the short message

Sending SMS while browsing the web:

If your network supports, you can send short messages when surfing on the Internet. Click **SMS** button, enter the SMS interface to write and send short messages normally.

3.4.3 The SMS box operating guide

Enter **Inbox/Sentbox/Draftbox/Important** to execute the following by clicking on each button or right-clicking on a message:

Reply: Reply short messages to the sender (available only in "**Inbox**").

Forward: Forward a short message to other recipients (available only in "**Inbox**").

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Move: Change the location where selected messages are stored (LOCAL or USIM/SIM card). By default, the messages the modem received are saved on LOCAL (computer).

Delete: Delete the selected short messages.

Save Number / Save Num: Save the sender's number to **Phonebook**.

Send: Send selected messages in **Sentbox**/**Draftbox**.

Edit: Edit selected message in "**Draftbox**".

Export/Import: Export the SMS to CSV or import SMS from CSV.

Save to Important: Move the SMS to **Important** folder.
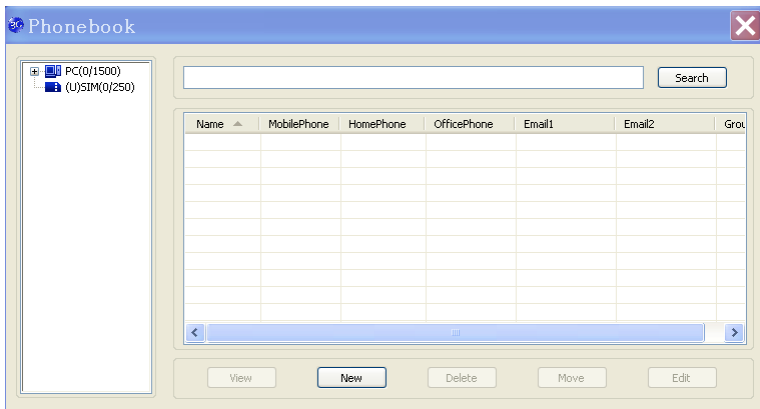
Revert: Move the SMS from **Important** or **Deleted** folder back to other folders.

If you want to select several messages, hold "**Ctrl**" or "**Shift**" key and left-click on the items.

New messages can not be received when the (U)SIM card is full (different USIM/SIM cards have different capacities). The system will indicate that the inbox is full and prompt you to clear the "**Inbox**" of USIM/SIM card.
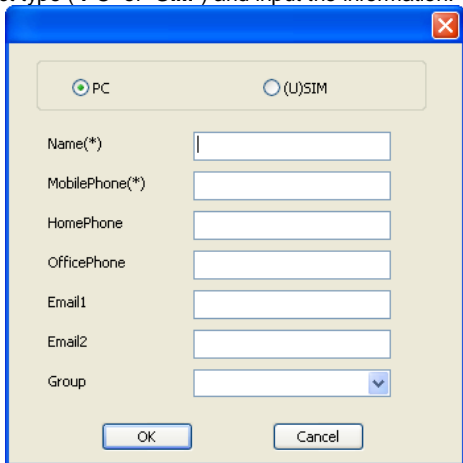
3.5 Phonebook

Click **Phonebook** icon to enter **Phonebook** interface. Contact information can be saved either on your PC or the SIM/USIM card. For each contact record on the PC, the information includes name, mobile phone number, home phone number, office phone number, emails and the group to which it belongs. For each contact record on the SIM/USIM card, the information only includes name and mobile phone number.

3.5.1 Create a new contact

1. Click "**New**" to add a new contact;
2. Select contact type ("**PC**" or "**SIM**") and input the information. Then click "**OK**".

3.5.2 Modify contacts

1. Select a contact and click **Edit**.

2. Edit the contact information and click **OK**.

3.5.3 Delete contacts

Select one or more contacts and then click **Delete**.

3.5.4 Send SMS to contacts

1. Right click the selected contacts and select **SMS**.

2. Input message content in the new window and click **Send**.

3.5.5 Search for a contact

1. Enter the keyword in the search box;

2. Click **Search** to search for matching results, which will be displayed in the contacts list.

3.5.6 Other buttons Description

If any contact is selected, you can execute any of the following by clicking on the corresponding button.

View: View the selected contact's information.

Move: Change the location (PC or SIM) where selected contacts information is stored.
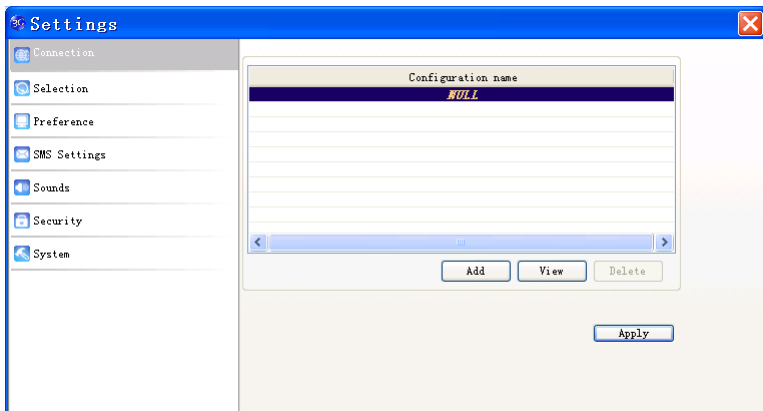
Right click on the contacts and you can create new contacts, view, edit, copy-and-paste, move, delete, export, or import selected contacts.

3.6 Settings

Click **Settings** icon 🔧 to switch to the settings interface.

Note: All the necessary settings have been preset by default. There is no need to change such settings. If you want to change these settings, please consult your service provider.

3.6.1 Connection

1 Button description

Add: Add new configuration files.

View/Edit: View/edit the selected configuration file. The default configuration can only be viewed, not edited.

Delete: Delete the selected configuration files.

2 Add new Configuration file
Click the **Add** button to add new connection information to the system. According to the requirement, there may be two modes for adding a new config.

Add Config
There are two parts of configuration information: **Common** and **Advance**.
The **Common** information includes **Config File**, **APN** and **User name**.
The **Advance** information includes **DNS**, **PDP server**, **Authentication mode** and **PDP Type**. Please consult your network service provider for all above information. The configuration information may vary as the service provider and network type differ.

3.6.2 Selection

Automatic: The system selects the network automatically.
Manual: Manually select the network.
When **Manual** is selected, click the **Search** button to search for available networks. Select the proper network from the search results and click **Apply** to confirm.
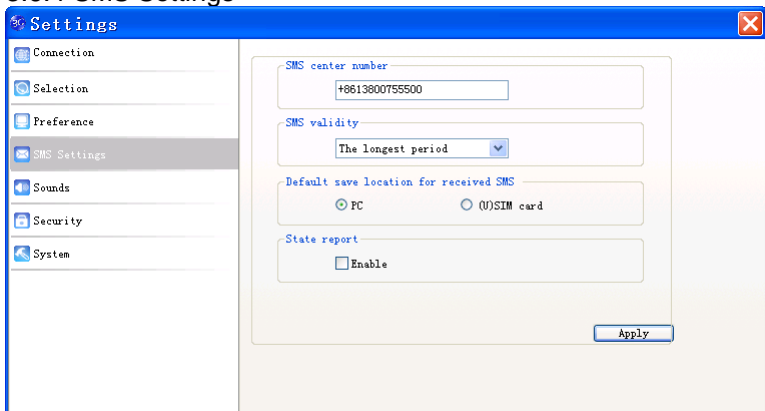
3.6.3 Preference

Automatic: The system selects available network automatically.
UMTS/HSPA Only: The system will only select UMTS or HSPA networks.
GPRS/EDGE Only: The system will only select GPRS or EDGE networks.

3.6.4 SMS Settings

SMS center number: Set the message center number. You can use the default number preset by your service provider. The correct SMS center number must be input in order to use the SMS properly. If you want to edit it, please consult with your service provider for more information.
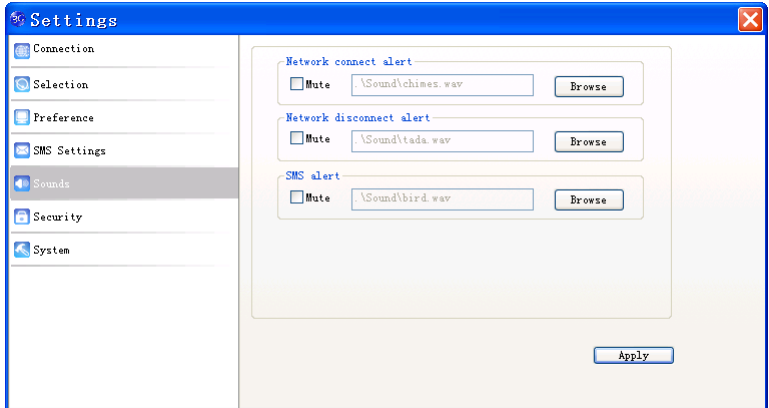
SMS validity: Set the time limit for saving SMS in the network side. (This function needs network support.) You can select **12 hours**, **A day**, **A week** or

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The longest period. The default setting is the longest period permitted by the network.

Default save location of received SMS: Select **PC** to save the received SMS in your PC; select **(U)SIM card** to save it in SIM/USIM card.
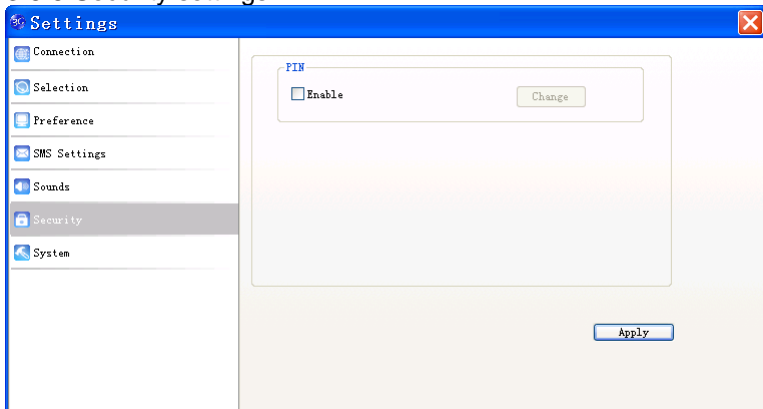
State report: Enable state report to receive notification when the message is sent successfully.

3.6.5 Sounds

You can set **Network connect alert**, **Network disconnect alert** and **SMS alert**. These alerts will sound on the PC side. The audio file supports MP3, WAV, MID and WMA formats. Select **Mute** to mute corresponding alert.
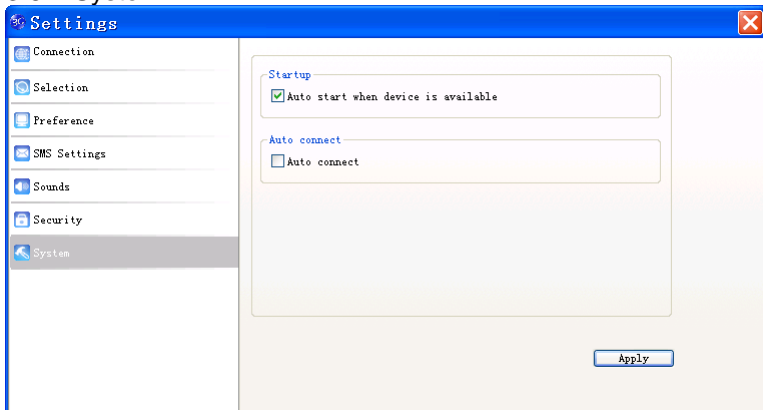
3.6.6 Security settings

Enable or disable PIN code protection. Click the **Change** button to change the PIN code. Click the **Apply** button and input the PIN code to apply the security changes.

Note: If the PIN code protection is enabled, you need to enter the PIN code every time you start to use the modem.

3.6.7 System

Auto start when device is available: The software will start automatically when the device is available.
Auto connect: Automatically connect to the Internet when the software is ready.

3.7 Data records

Click the **Data records** icon to check the log of Internet connection history.
In the **Transfer Data** tab, you can check the real-time upload/download speed, upload/download data and transfer time. You can also check the upload/download data and duration in one day, one month and one year.
In the **Data records** tab, select start date **From** and end date **To** on top to view the record of data exchange in the given period.
Select a record and click the **Delete** button to delete the record. Click **Clear** to delete all the records in the list.
Note: Data usage is approximate only. Please contact your operator for actual usage.

3.8 Help

Click , and then select "**Help**" to open the help interface.

4 FAQ & Answers

When you meet the following problems in service, please refer to the following answers to solve it. If the problems still exist, please contact with your suppliers.

Problem Description	Possible Causes	Problem Solving
After restarting the computer, there is no signal indicated.	1. You are in the place where there is no GSM/ GPRS /EDGE /WCDMA /HSPA network coverage. Such places include underground parking garages, tunnels, and some remote rural areas.	1. Change location to find a good where having signal.
	2. The (U)SIM card isn't inserted properly.	2. Remove and reinsert the (U)SIM card correctly.
	3. Your notebook is positioned in such a way as that adversely affects the devices signal reception.	3. Adjust the angle / position of your notebook or its proximity to other electronic devices.
Sent Message failure.	1. The SMS center number is incorrect.	1. The module is preconfigured so it is unlikely that it will need changing. However if it is missing or incorrect contact your operator.
	2. The network is busy or you are in an area with no signal.	2. Try later or move to an area with a stronger signal.

Problem Description	Possible Causes	Problem Solving
Date connection failed.	1. You are in the place where there is no GSM/ GPRS/ EDGE/ WCDMA/ HSPA network coverage.	1. Move to an area with good signal.
	2. The network is busy.	2. Try later.
	3. The APN in the user configuration file is incorrect.	3. Check the APN in the user configuration file in the "Network settings".
	4. The module data is corrupted.	4. Local network access or the target server maybe experiencing problems. Retry data request.
	5. The network type has been selected manually, but is incorrect.	5. Reselect the network type according to the type of the (U)SIM card.
Connected to the Internet, but it cannot open any website page.	1. After connection, you are unable to open web pages.	1. Check that the APN in the configuration files is correct.
	2. IE browser is causing problems.	2. Upgrade to the new version or reinstall the IE browser.
	3. Your operating system maybe infected by a virus. Worm Blaster for example can affect upload and downloaded data flow, resulting in an inability to access a website.	3. Use the professional anti-virus software to check and remove the virus.

Problem Description	Possible Causes	Problem Solving
	4. You have connected to an APN which cannot connect to the Internet.	4. This happens when you are changing any preset operator value in the setting section. Check the entry and enter the correct APN from your operator.